

REMARKS/ARGUMENTS

Presently, claims 1-130 are pending and stand rejected based on the combination of U.S. Patent Application 2004/0088737 (“Donlan”), U.S. Patent Application 2004/0261116 (“McKeown”), U.S. Patent Application 2002/0112175 (“Makofka”), and U.S. Patent Application 2002/0178455 (“Poli”).

Applicant thanks the Examiner for his time in conducting an in-person interview. Although the Applicant has amended the claims to better state the invention, Applicant has still provided arguments as to why the cited references do not render the claim obvious for the record.

In the previous Office Action, the Examiner rejected claims 1-19, 21-38, and 41-130 under 35 U.S.C. 103(a) as being unpatentable over Donlan in view of McKeown, and further in view of Makofka.

Applicant contends that the combination of the references does not render the claim obvious. First, Donlan discloses that the provisioning manager effectuates “the overall provision of the client devices with the necessary network components in a coordinated, common, and automated manner.” (Donlan, par. 8). Donlan indicates that the messaging between the provisioning manager and the other components “are conducted via appropriate protocol and signal interfaces and API’s defined for each respective network component provisioning system.” (Donlan, par. 11. See also par. 10, and par. 40). Thus, Donlan discloses the provisioning manager communicating in a “common” manner using APIs. There is no suggestion or disclosure of the messages being formatted using a protocol specific to the set top box being provisioned. Further, using protocol specific messages for provisioning each different host would be contrary to the concept of using a “common” manner, or using a defined API for effecting the provisioning.

Donlan also discloses “a database schema” stored on a data storage device (228 of Fig. 3). With respect to provisioning subscribers, the data storage is disclosed in three contexts – deleting a subscriber, suspending a subscriber, and activating a subscriber (Donlan, par. 49). In each instance, the disclosure indicates that the provisioning manager verifies a transaction by

“verifying the message use of the correct parameter size, the proper type, the proper type, the proper format and the proper field condition, and, if the foregoing are verified, *determining if the subscriber identification parameters have a match in data storage 228.*” (Donlan, par. 52, emphasis added. See also, par. 59 and 65). The data storage 228 is also discloses as maintaining the updated status (e.g., activated). (Donlan, par. 69).

Thus, Donlan discloses generating messages in the cable headend for provisioning a subscriber using a “common” method based on APIs. The only disclosure of the database 228 is for verifying parameters. There is no disclosure by Donlan of generating any type of host-specific messages that are derived using data in the database 228. Indeed, the disclosure of the database 228 indicate the data is used for verifying the contents of a message, not for deriving a protocol that would be specific to a host, for purposes of configuring the host.

Donlan discloses the provisioning manager “performing as a central collection and dissemination point for the provisioning data and directing provisioning data flows between a billing system, IP data network, server complex and/or other network systems.” (Donlan, Abstract). Thus, Donlan does not disclose transmitting the messages to a host on a digital communication (cable) network. Thus, there is no motivation for Donlan disclosing deriving a protocol that is specific to a host, for purposes of communicating to that host, as Donlan does not even communicate with the host.

In addition, Makofka was cited for the proposition that “host-specific protocol” messages are sent to a host. Applicant respectfully submits that Makofka does not disclose this, but rather discloses sending protocol specific messages to a functional unit (an object in a set top box). Makofka discloses only a common set top box connected to the cable network, thus negating any need to send a “host-specific” protocol message.

Makofka states that “various components of the same type may be distinguished by following the reference label by a dash and a second label that distinguishes among the similar components. If only the first reference label is used in the specification, the description is applicable to any one of the similar components having the same first reference label irrespective of the second reference label.” (Makofka, par. 21). Figure 2 illustrates various set top boxes as

items 208-1, 208-2,... 208-n. The specification discusses the set-top-box 208 as a type of entity (see, e.g., par. 36-39, 49-52, 59). Further, Mokafka discloses a set of functional objects (par. 60, Fig. 8) that are in the set top box (par. 60). Thus, there is no disclosure of specific types of hosts, since they are all the same type.

Thus, Makoska discloses a system for controlling a network of common set top boxes having a common set of objects, which can be controlled by sending object-specific messages (Makofka, par. 59-60). These are object-specific messages, for communicating with functional units (or object) that every host may have. This is consistent with the well known cable architectures of only accommodating a group of compatible set-top-boxes (e.g., of the same type).

Applicant submits that the limitations relied upon in Mokafka and Donlan are deficient in rendering obvious the limitations of the independent claims, and therefore the combination of McKeown, cited for the proposition that provisioning messages are sent to a host, is therefore also deficient in rendering the claimed limitations obvious.

Claims 20 and 39-40 were rejected in light of the above references, when considered in light of U.S. Patent Application 2002/0178455 ("Poli"). Poli was cited as disclosing the limitation of tuning an indicated channel to receive additional messages. As Applicant has demonstrated that Donlan and Makofka are deficient in rendering the independent claims, Applicant submits the combination with Poli are also deficient.

DISCUSSION OF AMENDMENTS

In an attempt to obtain an allowance of all claims and bring prosecution of the application to a close, Applicant has amended the claims, in part, to reflect one embodiment in which the configuration message sent to a host by the processor is derived from a host file, which may comprise a plurality of configuration commands and associated host protocol data. By selecting one of the plurality of configuration commands and using the associated host protocol

data, the processor can deriving a host-specific configuration message for executing the configuration command in the host.

For example, claim 1 has been amended to recite:

a host protocol file comprising a plurality of configuration commands and associated host protocols, wherein each configuration command pertains to a operation capable of being performed in a host and the associated host protocol comprises protocol data for generating a respective host-specific protocol provisioning message capable of being recognized by the host for executing the respective configuration command.

Independent claim 22 has been similarly amended to recite:

retrieving a host protocol file using a first interface in response to the activation message by ascertaining a host type associated with the activation message wherein the host protocol file comprises a plurality of configuration commands and associated host protocol data, each configuration command pertaining to an operation capable of being performed in a host and each associated host protocol data defining protocol data recognized by the host for executing the respective configuration command, the processor capable of selecting one of the host protocol data and deriving a host-specific protocol configuration message.

Independent claim 45 has been similarly amended to recite:

a host protocol file comprising a plurality of configuration commands and a plurality of associated host protocols, wherein each of plurality of configuration commands pertains to a respective operation capable of being performed in a host and each of the respective host protocols comprises protocol data for generating a host-specific configuration command message capable of being recognized by the host for executing the configuration command.

Independent claim 55 has been similarly amended to recite:

a server receiving a host protocol file comprising a plurality of configuration commands and associated host protocols wherein each configuration command pertains to an operation capable of being performed in a host and each associated host protocol comprises protocol data for generating an associated host-specific protocol configuration command.

Independent claim 60 has been similarly amended to recite:

an enhanced services server capable of generating a request for requesting a host protocol file, the request comprising ~~associated with~~ a first host identifier and a service indicator, the host protocol file comprising a plurality of configuration commands and respectively associated host protocol data, wherein each configuration command pertains to an operation capable of being performed in a host and each respective host protocol data comprises protocol data for generating a host-specific protocol command message capable of being recognized by the host for executing the configuration command wherein the enhanced services server selects one of the plurality of configuration commands and associated respective host protocol data from the host protocol file based on a service indicator, the enhanced services server generating the host-specific protocol command message and transmitting the at least one host-specific protocol command configuration message used by the enhanced services server to configure a the host for a service associated with the service indicator.

Independent claim 78 has been similarly amended to recite:

a host protocol file comprising at least one configuration command and an associated host protocol, wherein the configuration command pertains to an operation capable of being performed in a host and the host protocol comprises protocol data capable of being recognized by the host for executing the operation.

Independent claim 87 has been similarly amended to recite:

a host protocol file comprising a plurality of commands and associated host protocols, wherein each command pertains to a one or more operations capable of being performed in the host and the respective host protocol comprises protocol data for generating the one or more host-specific protocol messages capable of being recognized by the host for executing the associated command.

Independent claim 90 has been similarly amended to recite:

retrieving a host protocol file from ~~a~~ the memory using the host type wherein the host protocol file comprises at least one configuration command and an associated host protocol, wherein the configuration command pertains to an operation capable of being performed in the host and the host protocol comprises protocol data for generating a host-specific protocol configuration message recognized by the host for executing the configuration command

Independent claim 106 has been similarly amended to recite:

retrieving a host protocol file from the memory wherein the host protocol file is associated with ~~both~~ the host type ~~and the service identifier~~, wherein the host protocol file comprises at least one configuration command and an associated host protocol, wherein the the at least one configuration command pertains to an operation capable of being performed in the host and the at least one host protocol comprises protocol data for generating a host-specific protocol message capable of being recognized by the host for executing the configuration command.

Independent claim 113 has been similarly amended to recite:

retrieving a host protocol file by a processor wherein the host protocol file comprises a plurality of commands and associated host protocol, wherein each of the plurality of commands pertains to an operation capable of being performed in a host and the associated host protocol comprises protocol data for generating an associated host-specific protocol configuration message capable of being recognized by the host for executing the associated command.

Independent claim 118 has been similarly amended to recite:

the enhanced services server retrieving a host protocol file associated with the host type, the host protocol file comprising a plurality of configuration commands and a plurality of associated host protocols, wherein each configuration command pertains to an operation capable of being performed in a host and each associated host protocol comprises protocol data for generating a host-specific protocol provisioning message capable of being recognized by the host for executing the configuration command.

In addition to reciting the host protocol files, the remainder of the claims variously recite transmitting the host specific message to the host. The host-specific message can be provisioning messages, command messages, or configuration messages.

In addition, many of the claims recite, such as recited in claim 1 the “wherein the host is a device capable of processing digital video data and is associated with a host type.” This limits the hosts to devices capable of “processing digital video data.”

Further, many of the claims further recite that the host is associated with a “host type”, wherein, such as in claim 1, the “host type indicating a manufacturer and a model of the host.”

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Applicant has not seen the need for identifying the similar text in all the respective independent claims to the examiner.

SUMMARY/CONCLUSION

Applicant has amended the claims to reflect one embodiment of the invention, namely that the host protocol file comprises protocol information for deriving a host-specific protocol message that can be transmitted to the host for configuration or provisioning. In this manner, the cable network can accommodate a host requiring the use of a new protocol. Applicant respectfully submits that the above amendments recite limitations that are not disclosed or rendered obvious by the cited art of record. Applicant respectfully requests that the notice of rejection be withdrawn and that the claims be placed in a condition of allowance.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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